



1) not included in scope of delivery, 2) Housing length, 3) Recommended bracket distance, 4) Null point, 5) Nominal length, 6) Mechanical null point, 7) Stroke



Basic features

Approval/Conformity	CE UKCA cULus WEEE
Generation	1
Version	Version P1

Display/Operation

Setting	Output curve rising/falling
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Electrical connection

Connection	M12x1, 8-pin
Connection version	axial
Polarity reversal protected	to 36 V
Short-circuit protection	to GND and to 36 V DC

Electrical data

Current consumption max. at 24 V DC	90 mA
Galvanic isolation	yes
Inrush current	≤ 3 A/0.5 ms
Operating voltage Ub	18...30 VDC
Output current max.	6 mA
Output signal adjustable	using programming inputs
Overvoltage protection	to 36 V
Residual ripple max.	0.5 Vpp
Switch-on delay max.	500 ms
Voltage-proof up to (GND to housing)	500 V DC

Environmental conditions

Ambient temperature	-20...85 °C
EN 60068-2-27, Shock	100 g, 6 ms
EN 60068-2-6, Vibration	12 g, 10...2000 Hz
IP rating	IP54, with connector
Storage temperature	-40...100 °C

Functional safety

MTTF (40 °C)	77 a
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Interface

Analog output	Analog, voltage 0...10 V
Bracket distance, recommended	155 mm
Output characteristic	linear rising/falling

Material

Cover material	Zinc, Die-cast, nickel plated
Housing material	Aluminium, Anodized

Mechanical data

Housing length	275 mm
Hub	185 mm
Mounting part	Mounting clamps
Tightening torque max.	2 Nm

Inductive Sensors
BIW1-A310-M0175-P1-S115
Order Code: BIW0005

BALLUFF

Range/Distance

Measuring range	175 mm
Nominal length	175 mm
Non-linearity max.	±35 µm

Reproducibility	≤10 µm
Resolution	≤ 0.15 mV
Sampling rate typ.	32 kHz
Traverse speed max.	7 m/s

Connector Drawings



Wiring Diagrams

Pin	
1	Lb
2	0 V
3	NC
4	La
5	0...10 V
6	GND
7	+24V DC
8	NC